Digi TransPort® WR21

Compact Enterprise Class Cellular Router

Compact, flexible, low-cost enterprise 2.5G/3G/4G cellular router for remote and mobile networking applications.

Overview

Digi TransPort WR21 is a full-featured cellular router offering the flexibility to scale from basic connectivity applications to enterprise class routing and security solutions. With its high-performance architecture, Digi TransPort WR21 provides primary and backup connectivity and is designed for Wide Area Network connectivity including 2.5G/3G/4G networks and beyond. Optional Gobi™ module provides true HSPA+/EV-DO carrier diversity in a single solution.

Flexible power and connectivity options, along with extended temperature ranges make Digi TransPort WR21 a versatile product for both commercial and industrial environments.

Digi TransPort WR21 is available in both standard routing and enterprise configurations. The standard version offers basic routing, NAT and security, while the enterprise version adds advanced routing, security/VPN and stateful firewall. Advanced features allow the Digi TransPort WR21 to be used as a component of a PCI compliant network.

Digi management solutions provide easy setup, configuration and maintenance of large installations of remote Digi TransPort devices. Device Cloud by Etherios™ offers web-based device management for remote Digi cellular routers and gateways. Also available is the windows based Digi Remote Manager™ for customer installed device management and reporting.

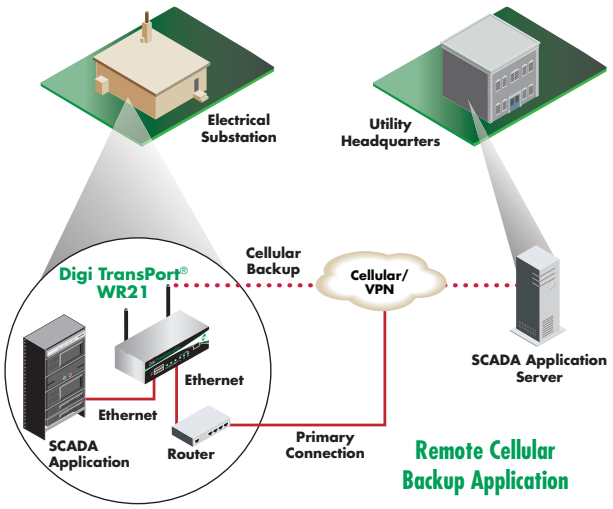
Related Products

VPN Concentrators

Digi Remote Management

Accessories

Application Highlight



Remote Cellular Backup Application

Features/Benefits

- Compact, low-cost, flexible cellular routing platform with standard and enterprise feature sets
- Standard option includes basic routing and IP filtering; Enterprise option includes advanced routing protocols, VPN and stateful firewall
- High-performance architecture, flexible power and extended operating temperature
- 2.5G/3G/4G cellular interface including: including LTE, GSM:EDGE, HSPA, HSPA+ and CDMA: 1xRTT, EV-DO
- RS-232 serial and 10/100 Ethernet or RS-232/422/485 serial and 2-port Ethernet switch
- Digi remote management software solutions, including the Device Cloud by Etherios, provide easy setup, configuration and maintenance of large installations

Specifications	Digi TransPort® WR21
Wireless Interfaces	
WWAN**	
LTE - Verizon (L2)	700 MHz (Band 13); 2G/3G fall back to CDMA 850/1900 MHz; Transfer rate (max): 50 Mbps up, 100 Mbps down
LTE - AT&T (L3)	700 MHz (Band 17)/AWS; 3G fall back to HSPA 850/AWS/1900/2100 MHz; 2G fallback to 850/900/1800/1900 MHz; Transfer rate (max): 50 Mbps up, 100 Mbps down
LTE - EMEA (L4)	800/900/1800/2100/2600 MHz; 3G fall back to HSPA+ 900/2100 MHz; 2G fallback to 900/1800/1900 MHz
GSM/CDMA Gobi (U8)	GSM and CDMA supported on the same module via Gobi diversity; UMTS/HSPA/HSPA+ (850/900/1700 AWS/1800/1900/2100 MHz with Rx Diversity); EV-DO Rev A (800/1900 MHz with Rx Diversity); Transfer rate (max): 5.76 Mbps Up, 14.4 Mbps Down
Edge (E1)	GPRS/EDGE Class 10; 850/900/1800/1900 MHz; Transfer rate (max): 236 Kbps up/down
CDMA 450 (Cx)	450 MHz; R-UIM support; Transfer rate (max): 1.8 Mbps up, 3.1 Mbps down
CDMA 1xRTT (Bx)	800/1900 MHz; Transfer rate (max): 153Kbps up/down
Connectors	U8, Lx variants: 2 x 50 Ω SMA (Center pin: female); E1, Cx, Bx variants: 1 x 50 Ω SMA (Center pin: female)
SIM Slots	2
SIM Security	Optional SIM slot cover plate
Other	
Additional Features	Send GPS via UDP/IP, TCP/IP (up to two destinations) or serial; Customize and/or send data using Python; GPS status query; Time source capable
Wired Interfaces	
Serial	
Ports	1
Standard	Option of RS-232 or RS-232/422/485
Async/Sync	Async
DTE/DCE	DCE
Signal Support	TXD, RXD, RTS, CTS, DTR, DCD, DSR, RI
Flow Control	Software (XON/XOFF), Hardware supported
COM Port Redirector	RealPort®
Connector	DB-9
Ethernet	
Ports	Option of 1 or 2
Standard	IEEE 802.3
Physical Layer	10/100 Base-T
Data Rate	10/100 Mbit/s
Mode	Full or Half duplex
Interface	Auto MDI/MDIX
Connector	RJ-45
USB	
Ports	Option of 1 or 2
Standard	USB 2.0
Signaling	High-speed
Connector	Type A
Other	
I/O	N/A
DSL	N/A
Software/Management	
Remote Management	Device Cloud by Etherios (cloud based); Digi Remote Manager (user installed/managed); SNMP v1/v2c/v3 (user installed/managed)
Local Management	Web interface (HTTP/HTTPS); CLI (Telnet, SSH, SMS, Serial Port)
Management/ Troubleshooting Tools	FTP, SFTP, SCP; Protocol analyzer with PCAP for Wireshark; Event logging with Syslog and SMTP; NTP/SNTP
Software Packages	Option of Standard or Enterprise. See next page for details.
Memory	128 MB NAND Flash/128 MB DDR2 SDRAM

* Optional hardware
** Transfer rates are theoretical and network operator dependent
*** Reduced cellular performance may occur above +60° C. Standard temperature power supplies may reduce temperature range.

Specifications	Digi TransPort® WR21
Power	
Input	9-30 VDC
Consumption	6W max, 4W typical
Connector	Depending on model: Locking barrel or screw-down removeable terminal block
DC Power Cord*	Locking barrel to bare wire
DC Power Supply*	100-240 VAC 50/60 Hz; Option of standard temperature or extended temperature
Battery Backup	None
Physical	
Dimensions (L x W x H)	3.9 in x 5.2 in x 1.3 in (100 mm x 131 mm x 32 mm)
Weight	1.08 lb (0.49 kg)
Status LEDs	Power, Service, WWAN, 3x Signal strength
Enclosure Material/Rating	Industrial (Metal)/ IP50
Mounting	Brackets for wall mount & DIN rail sold separately
Environmental	
Operating Temperature ***	-35° C to +75° C
Storage Temperature	-40° C to +85° C
Relative Humidity	0% to 95% (non-condensing) @ 25° C
Ethernet Isolation	1.5 kV RMS
Serial Port Protection (ESD)	15 kV
Hazardous (Class 1 Div 2)	Optional
Conformal Coating	N/A
Approvals	
GSM/UMTS	PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511
CDMA/EV-DO	CDG TIA/EIA-690, CDG TIA/EIA-98-E
Cellular Carriers	Certified by most major carriers.
Safety	UL 60950, CSA 22.2 No. 60950, EN60950
Emissions/Immunity	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55024, EN55022 Class B
Industry	N/A
Warranty	
Product Warranty	5 years

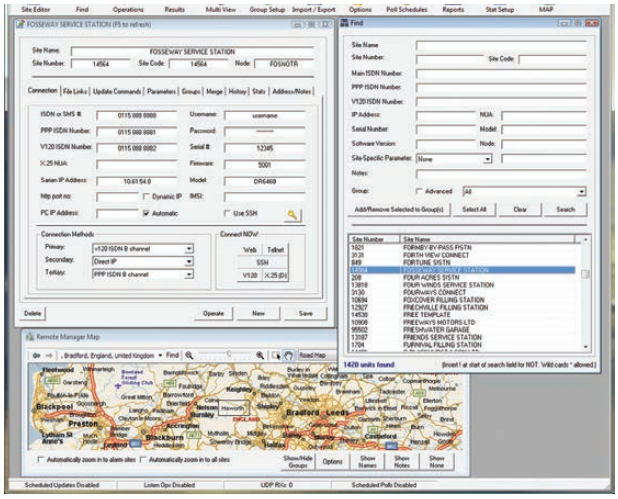
Software Packages	Enterprise	Standard
Protocols	Same as Standard plus Device Cloud; Dynamic DNS client compatible with BIND9/No-IP/DynDNS	HTTP, HTTPS, FTP, SFTP, SSL, SMTP, Device Cloud SNMP, SNMP (v1/v2c/v3), SSH, Telnet and CLI for web management; remote management via software tool (option); SMS management, protocol analyzer, ability to capture PCAP for use with Wireshark; DynDNS
Security/VPN	Stateful inspection firewall with scripting, address and port translation; VPN: IPSec with IKEv1, IKEv2, NAT Traversal; SSL, SSLv2, SSLv3, FIPS 197, Open VPN client and server; PPTP, L2TP; VPN Tunnels: 5 included. Additional available: WR21 (5 max.), WR41 (50 max.), WR44/WR44R/WR44RR (200 max.; Cryptology: SHA-1, MD5, RSA; Encryption: DES, 3DES and AES up to 256-bit (CBC mode for IPsec); Authentication: RADIUS, TACACS+, SCEP for X.509 certificates; Content Filtering (via 3rd party); MAC Address Filtering; VLAN support; Ethernet Port Isolation	IP filtering
Routing/Failover	IP pass-through; NAT, NAPT with IP Port Forwarding; Ethernet Bridging; GRE; Multicast Routing;Routing Protocols: PPP, PPPoE, RIP (v1, v2) OSPF, SRI, BGP, iGMP routing (multicast); IPv6 (firmware upgradable); RSTP (Rapid Spanning Tree Protocol); IP Failover: VRRP, VRRP+TM; Automatic failover/ failback to second GSM network/Standby APN	IP pass-through NAT, NAPT with IP Port Forwarding
Other Protocols	DHCP; Dynamic DNS client compatible with BIND9/No-IP/DynDNS; QoS via TOS/DSCP/WRED	DHCP; Dynamic DNS client compatible with BIND9/No-IP/DynDNS
Specialty/Legacy Protocols	RealPort®; Modbus UDP/TCP to serial; X.25 including XOT, SNA/IP, TPAD and PAD; Protocol switch*	RealPort®

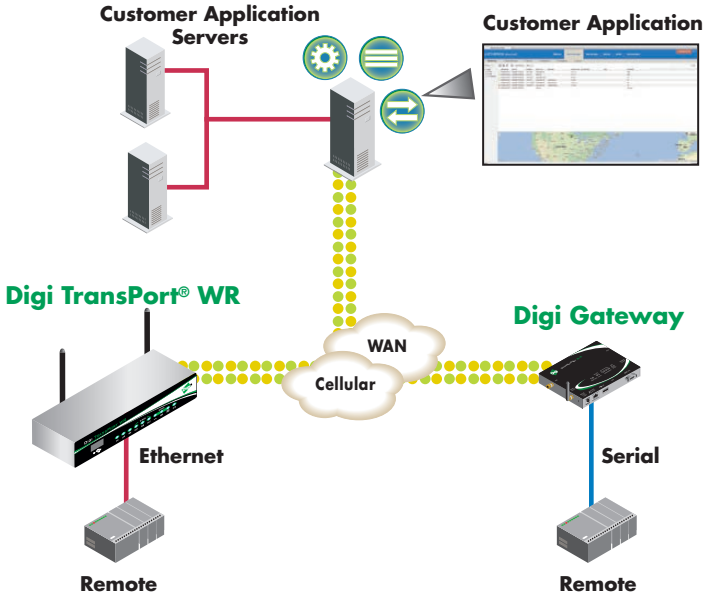
* Optional hardware
** Transfer rates are theoretical and network operator dependent
*** Reduced cellular performance may occur above +60° C. Standard temperature power supplies may reduce temperature range.

Device Management Features

- View of all remote devices and their connection status
- Automatic registration of newly connected devices
- Remote device configuration
- Actions include device grouping and scheduling of operations
- Monitoring of user specified events
- Device statistic and report generation
- Alarm generation and alerting
- Secure access to all devices from web browser, anywhere
- Remote reboot of device and default reset

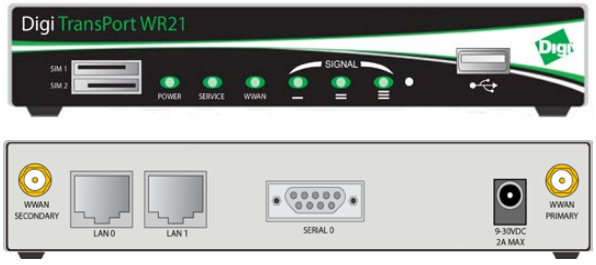
Easy Remote Configuration and Management





Product Images

Digi TransPort WR21



Visit www.digi.com for part numbers.

DIGI SERVICE AND SUPPORT - You can purchase with confidence knowing that Digi is here to support you with expert technical support and a strong five-year warranty. www.digi.com/support

91001738
B6/214

Digi International Worldwide HQ
877-912-3444
952-912-3444

Digi International France
+33-1-55-61-98-98
www.digi.fr

Digi International Japan
+81-3-5428-0261
www.digi-intl.co.jp

Digi International India
+91-80-4287-9887

Digi International Singapore
+65-6213-5380

Digi International China
+86-21-5150-6898
www.digi.cn

BUY ONLINE • **www.digi.com**

© 2011-2014 Digi International Inc.
All rights reserved. Digi, Digi International, Etherios, the Digi logo, Digi TransPort, RealPort, Digi Remote Manager and Device Cloud by Etherios, are trademarks or registered trademarks of Digi International Inc. in the United States and other countries worldwide. All other trademarks are the property of their respective owners. All information provided is subject to change without notice.

info@digi.com